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L1 24156 S SEMICONDUCTOR(P)DOP?
L2 21156 S PULS?(P)LASER
L3 4941 S PULS?(P)ION
L4 213 S L1(P)L2
L5 97 S L1(P)L3

=> d cit 14 1-

1. 5,725,914, Mar. 10, 1998, Process and apparatus for producing a functional structure of a semiconductor component; Hans Opower, 427/592; 204/192.1; 427/572, 586; 438/792 [IMAGE AVAILABLE]
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3. 5,706,094, Jan. 6, 1998, Ultrafast optical technique for the characterization of altered materials; Humphrey J. Maris, 356/432, 445 [IMAGE AVAILABLE]
4. 5,698,397, Dec. 16, 1997, Up-converting reporters for biological and other assays using laser excitation techniques; David A. Zarling, et al., 435/6; 216/25; 250/581; 313/467; 435/5, 7.1; 536/24.3 [IMAGE AVAILABLE]
5. 5,696,782, Dec. 9, 1997, High power fiber chirped pulse amplification systems based on cladding pumped rare-earth doped fibers; Donald J. Harter, et al., 372/25, 6, 70, 98, 102, 106, 703 [IMAGE AVAILABLE]
6. 5,696,011, Dec. 9, 1997, Method for forming an insulated gate field effect transistor; Shunpei Yamazaki, et al., 1/1 [IMAGE AVAILABLE]
- ✓7. 5,688,715, Nov. 18, 1997, Excimer laser dopant activation of backside illuminated CCD's; Douglas A. Sexton, et al., 1/1 [IMAGE AVAILABLE]
8. 5,674,698, Oct. 7, 1997, Up-converting reporters for biological and other assays using laser excitation techniques; David A. Zarling, et al., 435/7.92; 422/52, 56, 82.05; 435/7.1, 7.95; 436/169, 172 [IMAGE AVAILABLE]
9. 5,667,300, Sep. 16, 1997, Non-contact photothermal method for measuring thermal diffusivity and electronic defect properties of solids; Andreas Mandelis, et al., 374/43, 121, 128 [IMAGE AVAILABLE]
10. 5,654,904, Aug. 5, 1997, Control and 3-dimensional simulation model of temperature variations in a rapid thermal processing machine; Randhir P. S. Thakur, 364/557; 204/298.03, 298.09; 364/489; 438/5, 795 [IMAGE AVAILABLE]
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sink and diffuser plate for cooling small objects; Roger C. Farmer, 62/51.1, 259.2; 372/3 [IMAGE AVAILABLE]

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14. 5,618,741, Apr. 8, 1997, Manufacture of electronic devices having thin-film transistors; Nigel D. Young, et al., 438/151, 163, 535, 555 [IMAGE AVAILABLE]

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16. 5,606,570, Feb. 25, 1997, High power antiguidded semiconductor laser with interelement loss; Dan Botez, et al., 372/50, 18 [IMAGE AVAILABLE]

17. 5,594,748, Jan. 14, 1997, Method and apparatus for predicting semiconductor laser failure; Salim N. Jabr, 372/38, 6 [IMAGE AVAILABLE]

18. 5,592,282, Jan. 7, 1997, Suppression of stimulated scattering in optical time domain reflectometry; Arthur H. Hartog, 356/44; 250/227.18; 356/73.1, 301 [IMAGE AVAILABLE]

19. 5,590,141, Dec. 31, 1996, Method and apparatus for generating and employing a high density of excited ions in a laser; Brian Baird, et al., 372/10, 25, 70, 75 [IMAGE AVAILABLE]

20. 5,583,369, Dec. 10, 1996, Semiconductor device and method for forming the same; Shunpei Yamazaki, et al., 257/635, 66, 352, 353 [IMAGE AVAILABLE]

21. 5,581,570, Dec. 3, 1996, Semiconductor laser device; Yasuaki Yoshida, et al., 372/46, 45 [IMAGE AVAILABLE]

22. 5,577,057, Nov. 19, 1996, Modelocked lasers; Steven J. Frisken, 372/18, 6, 25, 94 [IMAGE AVAILABLE]

23. 5,576,556, Nov. 19, 1996, Thin film semiconductor device with gate metal oxide and sidewall spacer; Yasuhiko Takemura, et al., 257/69, 66, 72, 344, 391, 408 [IMAGE AVAILABLE]

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26. 5,569,615, Oct. 29, 1996, Method for forming a flash memory by forming shallow and deep regions adjacent the gate; Shunpei Yamazaki, et al., 438/257, 307, 535 [IMAGE AVAILABLE]

27. 5,569,398, Oct. 29, 1996, Laser system and method for selectively trimming films; Yunlong Sun, et al., 219/121.68, 121.69; 438/799, 940 [IMAGE AVAILABLE]

28. 5,567,646, Oct. 22, 1996, Method of making a stripe-geometry II/VI semiconductor gain-guided injection laser structure using ion implantation; Kevin W. Haberern, 438/45 [IMAGE AVAILABLE]

29. 5,561,612, Oct. 1, 1996, Control and 3-dimensional simulation model

of temperature variations in a rapid thermal processing machine; Randhir P. S. Thakur, 364/557, 74/121 [IMAGE AVAILABLE]

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34. 5,548,603, Aug. 20, 1996, Method for the generation of ultra-short optical pulses; Riccardo Calvani, et al., 372/25, 20, 34 [IMAGE AVAILABLE]

35. 5,548,433, Aug. 20, 1996, Optical clock recovery; Kevin Smith, 359/158, 179, 188, 341, 349; 372/18, 26, 28, 32 [IMAGE AVAILABLE]

36. 5,541,138, Jul. 30, 1996, Laser processing method, and method for forming insulated gate semiconductor device; Shunpei Yamazaki, et al., 438/535, 550, 565 [IMAGE AVAILABLE]

37. 5,538,564, Jul. 23, 1996, Three dimensional amorphous silicon/microcrystalline silicon solar cells; James L. Kaschmitter, 136/255, 256, 258; 257/458, 465; 438/96, 97, 535 [IMAGE AVAILABLE]

38. 5,530,585, Jun. 25, 1996, Optical soliton transmission system; John J. E. Reid, et al., 359/344, 185, 341; 372/33 [IMAGE AVAILABLE]

39. 5,528,611, Jun. 18, 1996, Repetitively Q-switched laser pumped by laser diodes and Q-switched with an intracavity variable speed moving aperture; Richard Scheps, 372/14, 9, 103 [IMAGE AVAILABLE]

40. 5,528,389, Jun. 18, 1996, Optical holographic system for parallel to serial and serial to parallel conversion of optical data; Martin C. Nuss, 359/4, 29, 559; 382/280 [IMAGE AVAILABLE]

41. 5,521,751, May 28, 1996, Noise measurement for optical amplifier and a system therefor; Kazuo Aida, et al., 359/337, 110, 177, 341 [IMAGE AVAILABLE]

42. 5,504,617, Apr. 2, 1996, Optical time domain reflectometry; David M. Spirit, 359/341, 110 [IMAGE AVAILABLE]

43. 5,499,599, Mar. 19, 1996, Method for continuous control of composition and doping of pulsed laser deposited films by pressure control; Douglas H. Lowndes, et al., 117/105, 108; 204/192.13, 298.03; 427/8, 586, 596; 438/478, 925 [IMAGE AVAILABLE]

44. 5,498,867, Mar. 12, 1996, Wavelength-division multiplex digital optical position sensor; Takeo Senuma, et al., 250/231.18, 226, 227.23; 356/395; 359/115 [IMAGE AVAILABLE]

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heads; Kyriakos Komvopoulos, et al., 427/527, 127, 130, 131, 132, 249, 250, 255.7, 294, 404, 411, 535, 576, 577, 578 [IMAGE AVAILABLE]

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50. 5,448,579, Sep. 5, 1995, Polarization independent picosecond fiber laser; Kok W. Chang, et al., 372/6, 18, 27 [IMAGE AVAILABLE]

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53. 5,434,878, Jul. 18, 1995, Optical gain medium having doped nanocrystals of semiconductors and also optical scatterers; Nabil R. Lawandy, 372/43, 22, 25, 41, 46 [IMAGE AVAILABLE]

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55. 5,426,686, Jun. 20, 1995, Compact high-intensity pulsed x-ray source, particularly for lithography; Peter M. Rentzepis, et al., 378/34; 101/467; 378/136; 430/966, 967 [IMAGE AVAILABLE]

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61. 5,404,371, Apr. 4, 1995, Semiconductor pulsation laser; Yoshihiro Kokubo, 372/45 [IMAGE AVAILABLE]

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63. 5,401,666, Mar. 28, 1995, Method for selective annealing of a semiconductor device; Hironori Tsukamoto, 438/305, 308 [IMAGE AVAILABLE]

64. 5,400,350, Mar. 21, 1995, Method and apparatus for generating high

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67. 5,386,798, Feb. 7, 1995, Method for continuous control of composition and doping of pulsed laser deposited films; Douglas H. Lowndes, et al., 117/50, 84, 88, 92, 103, 104; 148/DIG.64 [IMAGE AVAILABLE]

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✓ 78. 5,316,969, May 31, 1994, Method of shallow junction formation in semiconductor devices using gas immersion laser doping; Emi Ishida, et al., 438/535; 148/DIG.129 [IMAGE AVAILABLE]

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81. 5,285,467, Feb. 8, 1994, Compact, efficient, scalable neodymium laser co-doped with activator ions and pumped by visible laser diodes; Richard Scheps, 372/69, 19, 41, 68, 75, 92 [IMAGE AVAILABLE]
82. 5,285,460, Feb. 8, 1994, Total-solidification type tunable pulse laser; Yoshifumi Ueda, et al., 372/20, 10, 21, 22, 41 [IMAGE AVAILABLE]
83. 5,283,801, Feb. 1, 1994, External resonant ring cavity for generating high-peak-power laser pulses; George S. Mecherle, 372/94, 27, 30, 71, 93, 107 [IMAGE AVAILABLE]
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87. 5,272,361, Dec. 21, 1993, Field effect semiconductor device with immunity to hot carrier effects; Shunpei Yamazaki, 257/66, 192, 347, 410, 411 [IMAGE AVAILABLE]
88. 5,262,657, Nov. 16, 1993, Optically activated wafer-scale pulser with AlGaAs epitaxial layer; Anderson H. Kim, et al., 257/86; 250/214.1; 257/79, 94, 98 [IMAGE AVAILABLE]
89. 5,254,237, Oct. 19, 1993, Plasma arc apparatus for producing diamond semiconductor devices; Alvin A. Snaper, et al., 204/298.41, 192.38; 427/580 [IMAGE AVAILABLE]
90. 5,231,297, Jul. 27, 1993, Thin film transistor; Shoichiro Nakayama, et al., 257/77, 65, 66, 192 [IMAGE AVAILABLE]
91. 5,229,322, Jul. 20, 1993, Method of making low resistance substrate or buried layer contact; Shao-Fu S. Chu, et al., 117/53, 904; 148/DIG.90; 438/799 [IMAGE AVAILABLE]
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93. 5,218,609, Jun. 8, 1993, Solid laser oscillator; Seiji Oda, 372/20, 10, 22 [IMAGE AVAILABLE]
94. 5,217,306, Jun. 8, 1993, Temperature distribution analyzer using optical fiber; Fumio Wada, 374/161; 356/44, 301; 374/131, 137 [IMAGE AVAILABLE]
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99. 5,185,586, Feb. 9, 1993, Method and apparatus for digital synthesis of microwaves; Oved S. F. Zucker, 331/96; 307/106; 331/172, 173 [IMAGE AVAILABLE]
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103. 5,165,077, Nov. 17, 1992, Optical drop-and-insert apparatus; Hiroyuki Rokugawa, et al., 359/138, 160 [IMAGE AVAILABLE]
104. 5,148,251, Sep. 15, 1992, Photoconductive avalanche GaAs switch; Anderson H. Kim, et al., 257/458; 359/243 [IMAGE AVAILABLE]
105. 5,142,542, Aug. 25, 1992, Signal-resonant intracavity optical frequency mixing; George J. Dixon, 372/22; 359/326; 372/21, 69, 92 [IMAGE AVAILABLE]
106. 5,136,669, Aug. 4, 1992, Variable ratio fiber optic coupler optical signal processing element; David W. Gerdt, 385/39, 27, 42, 48 [IMAGE AVAILABLE]
107. RE 33,947, Jun. 2, 1992, Laser scribing method; Hisato Shinohara, 216/65, 75; 219/121.69, 121.85 [IMAGE AVAILABLE]
108. 5,114,876, May 19, 1992, Selective epitaxy using the gild process; Kurt H. Weiner, 117/53, 58; 148/DIG.105, DIG.106; 438/498, 535 [IMAGE AVAILABLE]
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111. 5,063,566, Nov. 5, 1991, Internally-doubled, composite-cavity microlaser; George J. Dixon, 372/22; 359/328; 372/41, 97, 106, 108 [IMAGE AVAILABLE]
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113. 5,056,096, Oct. 8, 1991, Hybrid doped fiber-semiconductor amplifier ring laser source; Robert A. Baker, et al., 372/6; 359/341; 372/18, 25, 44, 68, 93; 385/27, 32, 49 [IMAGE AVAILABLE]
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117. 5,031,182, Jul. 9, 1991, Single-frequency laser of improved amplitude stability; Douglas W. Anthon, et al., 372/31, 22, 34, 69, 70, 71, 94 [IMAGE AVAILABLE]
118. 5,008,729, Apr. 16, 1991, Laser programming of semiconductor devices using diode make-link structure; Kendall S. Wills, et al., 326/41; 257/290; 326/38 [IMAGE AVAILABLE]
119. 5,005,462, Apr. 9, 1991, Laser controlled semiconductor armature for electromagnetic launchers; Louis J. Jasper, Jr., et al., 89/8; 124/3 [IMAGE AVAILABLE]
120. 5,000,540, Mar. 19, 1991, Sensing system using optical fibers; Kazunori Nakamura, 385/12; 250/227.14, 227.19 [IMAGE AVAILABLE]
121. 4,973,122, Nov. 27, 1990, Optical nonlinear cross-coupled interferometer and method utilizing same; David Cotter, et al., 385/50; 250/227.11, 227.19; 307/407, 409; 356/350; 385/1, 122 [IMAGE AVAILABLE]
122. 4,961,197, Oct. 2, 1990, Semiconductor laser device; Toshiaki Tanaka, et al., 372/45; 257/21, 22; 372/46 [IMAGE AVAILABLE]
123. 4,959,540, Sep. 25, 1990, Optical clock system with optical time delay means; Bunsen Fan, et al., 250/227.12; 385/39 [IMAGE AVAILABLE]
124. 4,956,843, Sep. 11, 1990, Simultaneous generation of laser radiation at two different frequencies; Pedram Akhavan-Leilabady, et al., 372/23, 68, 71, 75 [IMAGE AVAILABLE]
125. 4,933,947, Jun. 12, 1990, Frequency conversion of optical radiation; Douglas W. Anthon, et al., 372/34, 21, 94 [IMAGE AVAILABLE]
126. 4,932,747, Jun. 12, 1990, Fiber bundle homogenizer and method utilizing same; Stephen D. Russell, et al., 385/115; 65/410; 219/121.6, 121.61, 121.79; 362/32, 259; 372/57; 385/121 [IMAGE AVAILABLE]
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128. 4,901,330, Feb. 13, 1990, Optically pumped laser; Thomas Wolfram, et al., 372/75, 46, 50, 71 [IMAGE AVAILABLE]
129. 4,899,204, Feb. 6, 1990, High voltage switch structure with light responsive diode stack; Har'el Rosen, et al., 250/551; 257/82, 458; 372/35 [IMAGE AVAILABLE]
130. 4,897,849, Jan. 30, 1990, Compact slab laser oscillator-amplifier system; John L. Hughes, 372/66, 93 [IMAGE AVAILABLE]
131. 4,891,815, Jan. 2, 1990, Bulk avalanche semiconductor laser; Larry O. Ragle, et al., 372/44, 46, 49 [IMAGE AVAILABLE]
132. 4,888,556, Dec. 19, 1989, Linear induction accelerator and pulse forming networks therefor; Malcolm T. Buttram, et al., 315/505 [IMAGE AVAILABLE]

133. 4,884,277, Nov. 28, 1989, Frequency conversion of optical radiation; Douglas A. Athon, et al., 372/22, 21, 71, [IMAGE AVAILABLE]
134. 4,879,723, Nov. 7, 1989, Intracavity generation of coherent optical radiation of optical mixing; George J. Dixon, et al., 372/21; 359/326; 372/75 [IMAGE AVAILABLE]
135. 4,879,722, Nov. 7, 1989, Generation of coherent optical radiation by optical mixing; George J. Dixon, et al., 372/21; 359/326; 372/22, 75 [IMAGE AVAILABLE]
136. 4,865,923, Sep. 12, 1989, Selective intermixing of layered structures composed of thin solid films; John D. Ralston, et al., 428/620; 148/33.4, DIG.84; 427/552, 555; 438/47, 796 [IMAGE AVAILABLE]
137. 4,865,686, Sep. 12, 1989, Laser scribing method; Hisato Sinohara, 216/101, 65; 219/121.69, 121.85 [IMAGE AVAILABLE]
138. 4,861,964, Aug. 29, 1989, Laser scribing system and method; Hisato Sinohara, 219/121.68, 121.73 [IMAGE AVAILABLE]
139. 4,825,081, Apr. 25, 1989, Light-activated series-connected pin diode switch; Douglas A. Wille, et al., 250/551; 257/80, 432, 443, 458, 607, 623; 327/514 [IMAGE AVAILABLE]
140. 4,824,489, Apr. 25, 1989, Ultra-thin solar cell and method; George W. Cogan, et al., 136/256, 259, 261; 438/64, 89, 96 [IMAGE AVAILABLE]
141. 4,818,100, Apr. 4, 1989, Laser doppler and time of flight range measurement; Michael T. Breen, 356/5.06, 5.09, 28.5, 141.4, 141.5 [IMAGE AVAILABLE]
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153. 4,730,335, Mar. 8, 1988, Solid state laser and method of making; John H. Clark, et al., 372/98, 21, 71, 75, 101, 107 [IMAGE AVAILABLE]
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L1      24156 S SEMICONDUCTOR(P)DOP?
L2      21156 S PULS?(P)LASER
L3      4941 S PULS?(P)ION
L4      213 S L1(P)L2
L5      97 S L1(P)L3
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